0138: COMPARING PAIN AND ANALGESIA REQUIREMENTS IN DIFFERENT PROCEDURES FOR THE TREATMENT OF HIP FRACTURES

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Intro: Hemiarthroplasty and proximal femoral fixation are commonly performed procedures, but there is little information regarding post-operative pain experience. Whilst patient comfort is a priority and a requirement for successful rehabilitation, opiate effects are also undesirable especially within this complex, often aged population. A sound strategy of pain management is easier to implement in patients where pain levels can be predicted.

Results: 357 patients were included. 205 underwent a cemented hemiarthroplasty (HA) and 152 had a dynamic hip screw (DHS). No significant difference was found in the length of hospital stay. HA patients recorded a mean morphine requirement of 20.2mg compared with 40.3mg for the DHS group. Interestingly, the early pain score difference was significant ($p=0.009$), after 4 days, the scores were equivalent. This may support the notion of non-surgical factors determining the length of stay.

Conclusion: The reason for the elevated pain scores and higher morphine requirement in the DHS group remains unclear. One theory is the fracture site still exists, and possibly pre-existing hip arthritis may continue to be symptomatic. It is important to recognise the difference in pain experienced between the groups. An understanding of this principle will allow for improved care and a better patient experience.

0156: IMPROVING COMMUNICATION BETWEEN ORTHOPAEDICS AND PRIMARY CARE: A CLOSED LOOP AUDIT CYCLE

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Aims: A discharge summary may be the only notification of admission to trauma ward for a General Practitioner, hence the quality of this document is crucial. This audit cycle aimed to assess and improve the accuracy and content of discharge summaries from our Orthopaedic Department.

Methods: A randomised, prospective audit of 60 orthopaedic discharge summaries was carried out. Content was audited against our Trust's gold standards, over a 7 week period.

After the initial audit, medical staff were given an educational session stressing essential content to be included in discharge summaries. In addition, brief, focused, one-to-one teaching sessions with ward based doctors were held. A re-audit was then conducted.

Results: The initial audit found 90% of discharge summaries had a correct diagnosis and treatment, whilst 91% had accurate medical co-morbidities listed, improving to 100% and 97% respectively post intervention. 72% of summaries had a drug allergy status detailed and 72% had accurate follow up plans documented, increasing to 95% and 100% respectively.

Conclusions: This audit exemplified how group teaching followed by short, non labour intensive, one-to-one sessions had positive effects on the accuracy of discharge summaries, ensuring important information was transferred between orthopaedics and primary pare, thus improving patient safety.

0165: TIP APEX DISTANCE IN DYNAMIC HIP SCREW FIXATION IN PATIENTS WITH AN EXTRACAPSULAR NECK OF FEMUR FRACTURE; AN AUDIT ON CHANGE

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Aim: A recognised complication of dynamic hip screw (DHS) fixation is the screw cutting out from the femoral head. A distance of less than 25mm from the tip of the screw to the apex of the femoral head has been consistently shown to be associated with a reduction in cut-out rates. This audit was undertaken to assess the variability in screw positioning at our district general hospital, recommend improvements, and re-audit the positioning following departmental education.

Method: This retrospective audit was initially undertaken in August to October 2007, then re-audited in January to May 2012, after educating junior surgeons about the tip-apex-distance (TAD) in departmental introductions. The TAD was calculated by the total of the TAD on the anterior-posterior and lateral radiographs.

Results: The initial audit included 10 patients; 6 (60%) had a TAD greater than 25mm. Incorrect TAD was secondary to insufficient fracture reduction (83%), and wrong direction of the screw (17%). The re-audit involved 19 patients; 1 (5.2%) had a TAD greater than 25mm ($p<0.01$).

Conclusions: This audit demonstrates a significant improvement in surgical technique, by raising awareness of local failure rates, and emphasizing the importance of the TAD through continued education and re-auditing of current practices.

0178: ADMISSION BLOOD TESTS SIGNIFICANTLY UNDERESTIMATE ANAEMIA IN HIP FRACTURE PATIENTS – A PROSPECTIVE COHORT STUDY

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Introduction: Mortality after hip fracture remains high. Preoperative anaemia is a risk factor for operative mortality. We hypothesise that admission blood results in hip fracture underestimate anaemia, perhaps due to a dilutional effect during resuscitation.

Methods: We prospectively repeated patients' haemoglobin (Hb), haematocrit (Hct), urea and creatinine tests in the anaesthetic room prior to surgery.

Results: were compared with admission and postoperative values, demographic data and outcomes. 100 patients were included (75 women, 25 men) – 46 extracapsular (EC) and 54 intracapsular (IC) fractures. The mean fall in Hb preoperatively was 11.7 g/L in EC fractures and 7.3 g/L in IC fractures ($p=0.015$), with no significant difference between sexes. The proportionate fall in Hb (8.0%) prior to surgery was matched closely by changes in Hct (6.0%), urea (4.4%) and creatinine (5.2%). On multiple regression analysis the strongest predictor of mortality was a delay between injury and presentation ($p=0.009$) with proportionate preoperative and perioperative changes in Hb also predicting mortality ($p=0.023$ and $p=0.024$, respectively).

Conclusion: We conclude that admission blood tests underestimate anaemia in Hb patients and that this is largely a dilutional effect. Repeating Hb tests prior to surgery may be warranted in high risk patients.

0181: TALES FROM A COMMUNITY HOSPITAL; DOES ENHANCED RECOVERY AFTER SURGERY EXPEDITE PATIENT DISCHARGE FOLLOWING TOTAL KNEE AND TOTAL HIP REPLACEMENTS?

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Aims: This closed loop prospective audit aimed to evaluate the effect of introducing ERAS for patients undergoing elective total hip replacement (THR) and total knee replacement (TKR) on mean length of stay (LOS) in our community hospital.

Method: All patients who underwent primary THR or TKR between January 2012 and May 2012 were compared to all patients, post-introduction of ERAS, between June 2012 and November 2012 receiving the same operations. The effect of ERAS on mean LOS, patients of different genders, and those undergoing TKR vs THR was analysed.

Results: 48 consecutive patients pre-introduction of ERAS (30 female, 18 male, mean age 70 years) were compared to 57 consecutive patients (35 female, 22 male, mean age 71 years) post-introduction of ERAS. The mean LOS reduced from 6.0 to 5.6 days ($p=0.34$). ERAS had a greater effect on LOS in TKRs (6.0-5.4 days, $p=0.29$) than in THRs (6.0-6.0 days), which compares favourably to the Department of Health Report (mean LOS 6.1 days and 6.3 days respectively). Males undergoing TKR had the greatest reduction in mean LOS (6.2 days to 5.4 days, $p=0.53$).

Conclusions: ERAS reduced mean LOS following lower limb arthroplasty, with males undergoing TKRs showing the greatest benefit.

0197: THE IMPACT OF PRE-OPERATIVE ECHOCARDIOGRAMS ON TIME TO SURGERY IN PATIENTS WITH FRACTURED NECK OF FEMUR

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Aims: Determine if pre-operative Echocardiograms in patients admitted with a fractured neck of femur was significantly and unnecessarily delaying time to surgery.

Methods: Data collected retrospectively for 4 month period on patients presenting with a fractured neck of femur, who had a pre-operative